

Feedback: An Overview

Feedback says to a student, “Somebody cared enough about my work to read it and think about it!” Most teachers want to be that “somebody.” Feedback matches specific descriptions and suggestions with a particular student’s work. It is just-in-time, just-for-me information delivered when and where it can do the most good.

This book is intended to help teachers provide such feedback to students. The focus is on feedback that comes from a teacher to a student and is based on student work. In the context of the book, the term *feedback* means “teacher feedback on student schoolwork.” Important as they are, responses to student behavior are not considered here.

Feedback as Part of Formative Assessment

Feedback is an important component of the formative assessment process. Formative assessment gives information to teachers *and students* about how students are doing relative to classroom learning goals. From the student’s point of view, the formative assessment “script” reads like this: “What knowledge or skills do I aim to develop? How close am I now? What do I need to do next?” Giving good feedback is one of the skills teachers need to master as part of good formative assessment. Other formative assessment skills include having clear learning targets, crafting clear lessons and assignments that communicate those targets to students, and- usually after giving good feedback- helping students learn how to formulate new goals for themselves and action plans that will lead to achievement of those goals.

Feedback can be very comfortable if done well. The power of formative feedback lies in its double-barreled approach, addressing both cognitive and motivational factors at the same time. Good feedback gives students information they need so they can understand where they are in their learning and what to do next- the cognitive factor. Once they feel they understand what to do and why, most students develop a feeling that they have control over their own learning- the motivational factor.

Good feedback contains information that a student can use, which means that the student has to be able to hear and understand it. Students can’t hear something that’s beyond their comprehension; nor can they hear something if they are not listening or are feeling like it would be useless to listen. Because students’ feelings of control and self-efficacy are involved, even well-intentioned feedback can be very destructive. (“See? I knew I was stupid!”) The research on feedback shows its Jekyll-and-Hyde character. Not all studies about feedback show positive effects. The nature of the feedback and the context in which it is given matter a great deal.

Good feedback should be part of a classroom assessment environment in which students see constructive criticism as a good thing and understand that learning cannot occur without practice. If part of the classroom culture is to always “get things right,” then if something needs improvement, it’s “wrong.” If, instead, the classroom culture values finding and using suggestions for improvement, students will be able to use feedback, plan and execute steps for improvement, and in the long run reach further than they could if they were stuck with assignments on which they could already get an A without any new learning. It is not fair to students to present them with what seems like constructive criticism and then use it against them in a grade or final evaluation.

What the Research Shows

The first studies and theories about feedback are almost 100 years old and arose out of the psychological perspective called *behaviorism* (Thorndike, 1914). Positive feedback was considered “positive reinforcement,” and negative feedback was considered “punishment.” Both reinforcement

and punishment affect learning; thus, feedback was theorized to be effective. The problem with this theory is that not all feedback actually is effective.

More recently, scholars have tried to tease out, from a large body of research on feedback that has accumulated over the intervening 100 years, what makes some feedback effective and some ineffective (Bangert-Drowns, Kulik, Kulik, & Morgan, 1991; Butler & Winne, 1995; Hattie & Timperley, 2007; Kluger & DeNisi, 1996). Other researchers have concentrated on describing the characteristics of effective feedback (Johnston, 2004; Tunstall & Gipps, 1996).

Educational theorists no longer explain learning with behaviorist theories about stimulus-response connections. More recent studies recognize the role of the student in the feedback process. They study the kind of feedback given and the context in which it was presented. What we now realize is that the message sent is filtered through the student's perception (influenced by prior knowledge, experiences, and motivation) as it becomes the message received. The student's job is to make meaning from schoolwork, not to respond to stimuli.

Making meaning requires using and controlling one's own thought processes. This is called *self-regulation*. Butler and Winne's (1995) research review showed that both external feedback (such as teacher feedback) and internal feedback (such as student self-evaluation) affect student knowledge and beliefs. Together they help students with self-regulation: deciding on their next learning goals, devising tactics and strategies to reach them, and producing work. An important point here is that teacher feedback is not teacher regulation. Teachers can't "make" students focus on or learn something. Teacher feedback is input that, together with students' own internal input, will help the students decide where they are in regard to the learning goals they need or want to meet and what they will tackle next.

Kluger and DeNisi (1996) did a meta-analysis (a quantitative summary of results) of studies of feedback. Their overall finding was that the average effect of feedback intervention on performance was .41. This means that across all the studies, groups receiving feedback on average outperformed their respective control groups by .41 standard deviations- the equivalent of moving from the 50th to the 66th percentile on a standardized test. However, more than 38 percent of the effect sizes from the various studies that went into this .41 average were negative- that is, showed that control groups outperformed feedback groups. The effects of feedback depend on the nature of the feedback.

Hattie and Timperley (2007) reviewed these and other works to synthesize a model of feedback that focuses on its meaning. Their review used the lens of formative assessment questions (Where am I going? How am I going? Where to next?), which they call "feedback questions." Thus, they recognized the importance of feedback in the formative process. Feedback can be the information that drives the process, or it can be a stumbling block that derails the process.

Hattie and Timperley (2007) propose a model of feedback that distinguishes four levels: (1) feedback about the task (such as feedback about whether answers were right or wrong or directions to get more information), (2) feedback about the processing of the task (such as feedback about strategies used or strategies that could be used), (3) feedback about self-regulation (such as feedback about student self-evaluation or self-confidence), and (4) feedback about the student as a person (such as pronouncements that a student is "good" or "smart"). The level at which the feedback is focused influences its effectiveness. Feedback about the qualities of the work and feedback about the process or strategies used to do the work are most helpful. Feedback that draws students' attention to their self-regulation strategies or their abilities as learners can be effective if students hear it in a way that makes them realize they will get the results they want if they expend effort and attention. Personal comments ("Good girl!") do not draw students' attention to their learning.